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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,450	01/23/2002	Tadayoshi Muta	03500.016133	6441

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EXAMINER

LEE, EUGENE

ART UNIT	PAPER NUMBER
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2815

DATE MAILED: 05/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/052,450

Applicant(s)

MUTA, TADAYOSHI

Examiner

Eugene Lee

Art Unit

2815

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 5 and 9-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/23/02 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Claims 9-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Applicant timely traversed the restriction (election) requirement in Paper No. 7.

2. Applicant's election with traverse of Group I in Paper No. 7 is acknowledged. The traversal is on the ground(s) that there would be undue burden in examining the claims of Groups I and II in a single application. This is not found persuasive because the Group I claims are directed towards apparatus that would require a search in class 257 whereas Group II claims are directed towards process of making that would require a separate search in class 438. Therefore since the claims of Group I and Group II require two separate searches in two separate fields, the requirement is still deemed proper and is therefore made FINAL.

3. Applicant's election without traverse of Species I in Paper No. 7 is acknowledged.

4. Claims 5 and 18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim.

Election was made **without** traverse in Paper No. 7.

Information Disclosure Statement

5. The information disclosure statement filed 7/3/02 fails to comply with 37 CFR 1.98(a)(1), which requires a list of all patents, publications, or other information submitted for consideration by the Office. It has been placed in the application file, but the information referred to therein has not been considered.

Drawings

6. The drawings are objected to because FIG. 1 and FIG. 2 show contrary representations of the same structure. In FIG. 1, applicant shows wires 4 extending outward from the encapsulating resin 3. However, in FIG. 2 (which is a sectional view of FIG. 1), applicant shows those same wires within the encapsulating resin 3. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance. C

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In the claim 3, the applicant states the limitation “at least one side of the coil is exposed from a surface of the resin”, however, in claim 2, the applicant states the limitation “the coil ... are encapsulated with a resin”. Since claim 3 is dependent on claim 2, it is unclear how the coil can exposed from a surface of the resin and then encapsulated within a resin at the same time. It is also unclear how a wire can be exposed from the surface of a resin if the semiconductor device is an IC card (i.e. credit card, ATM card, smart card).

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1 thru 4, 7 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Akagawa et al. 6,255,725 B1. Akagawa discloses (see, for example, Fig. 1 and 2) a semiconductor device comprising a semiconductor element (IC chip) 14, coil 12, and terminals (connecting terminals) 12a. In column 3, lines 60-63, Akagawa discloses the coil being made by etching or punching a sheet of metal. Regarding claim 2, see the resin films 10 that encapsulate the semiconductor element, coil and terminals to form an IC card. Regarding claim 4, see wires 16.

11. Claims 1 thru 4, 7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe 10-337982 JPO. Watanabe discloses (see, for example, FIG. 1 and 2) a semiconductor device comprising an IC chip 5, coil 4, peripheral side ends (connecting terminals) 4a, 4b and die pad (IC chip supporting section) 13. The coil, peripheral side ends and die pad are made from the same metal film. Regarding claim 2, see epoxy (resin) 25. Regarding claim 4, see wires 9a.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akagawa et al. 6,255,725 B1 as applied to claims 1-4, 7 and 8 above, and further in view of Honore et al. 5,272,596. Akagawa does not disclose a part of one side of the coil being bonded and fixed with a tape. However, Honore discloses (see, for example, FIG. 1) a semiconductor device comprising a coil 26. In column 3, lines 43-44, Honore discloses the coil 26 bonded by a double-sided tape. The coil keeps the coil from moving and stable within a semiconductor device. Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to include the double sided tape (a part of one side of the coil being bonded and fixed with a tape) of Honore in Akagawa's invention in order to stabilize the coil within the semiconductor device.

INFORMATION ON HOW TO CONTACT THE USPTO

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eugene Lee whose telephone number is 703-305-5695. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie C. Lee can be reached on 703-308-1690. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Eugene Lee
May 14, 2003



EDDIE LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800